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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/393,126

09/10/99

AIELLO

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FANT-99-002

WM01/1106

EXAMINER

TRAN, M

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ART. UNIT.	PAPER NUMBER
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2664

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DATE MAILED: 11/06/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

02

Office Action Summary

Application No.

09/393,126

Applicant(s)

AIELLO et al.

Examiner

MAIKHANH T. TRAN

Art Unit

2664

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 August 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 51-75, 88, 89 and 93-143 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 51-75, 88, 89, 93-103, 106-109, 113-129 and 135-140 is/are allowed.
- 6) ☒ Claim(s) 104, 105, 110-112, 130-134 and 141-143 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

Applicant's Amendment filed on 08/27/01 has been fully considered and made of record. By this amendment, claims 1-2, 4, 6-8, 10-14, 16-50, 76-87 and 90-92 have been cancelled, claims 104-143 have been added. Claims 51-75, 88-89 and 93-143 are now pending. In view of the following new ground of rejection, this office action is NOT made final.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 104-105, 110-112, 130-132, 133-134 and 141-143 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paneth et al (U.S. 6,014,374) in view of Fullerton et al. (U.S. 6,031,862).

- Paneth et al., in figs. 1, 4 and the description associated with the figures disclose a wireless communication network system comprising at least three transceivers, each transceiver having a transmitter and a receiver, one of said transceivers (inside 11) being structured and configured as a master device, said master device structured and configured to manage data transmission between said

master device and said at least two other transceivers (10) and data transmission between said at least two other transceivers (10). Moreover, in Paneth et al., each said transceiver further comprises a framing controller having means for generating and maintaining time frame information for said network system and each slave transceiver(10) comprises a local clock, said master transceiver comprises a master clock therein each said local clock synchronized with said master clock (see col. 10, line 1- col. 11, line 20). Besides, a frame in Paneth et al comprising a master slot (RCC slot), a command slot (4-ary slot) and a plurality of data slots (16-ary slots).

Paneth et al., however, fail to fairly suggest that said transmitters are structured and configured to emit RF pulses operating with UWB wireless technology and said receivers are structures and configured to receive RF pulses and that said transceivers are structured and configured to transfer data to other said transceivers isochronously.

Fullerton et al., in abstract, introduce an impulse radio technology/UWB time domain used in wireless communications system wherein an impulse radio link can communicate many independent channels simultaneously by employing different subcarriers for each channel. Therefore it would have been obvious to ones skilled in the art at the time the invention was made to apply Fullerton et al's teaching in Paneth et al' by using UWB time domain and subcarriers in Paneth et al. to enable transceivers to transfer data to other said transceivers simultaneously to increase the transmission in Paneth et al ' system.

Allowable Subject Matter

3. The following is an examiner's statement of reasons for allowance:

- As to claims 51-75, 88-89, 93-103, 106-109, 121-127 and 135-137, the prior art of the record fail to teach that the system further comprising a specific MAC unit/hardware interface (as recited in claims 51, 93, 106, 121, 135-136);

- As to claims 113-117, 118-120, 138-140, the prior art fail to teach that said master having a protocol operating in slotted ALOHA mode and TDMA mode and the master device managing said protocol and said data slots in said protocol.

- As to claims 128-129, the prior art fail to teach that said transmitters are structured and configured to emit RF pulses operating with baseband wireless technology and transfer data to other said transceivers isochroneously.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MAIKHANH T. TRAN whose telephone number is 703-308-7911. The examiner can normally be reached on MON-FRI 8:30AM - 6:00 PM.

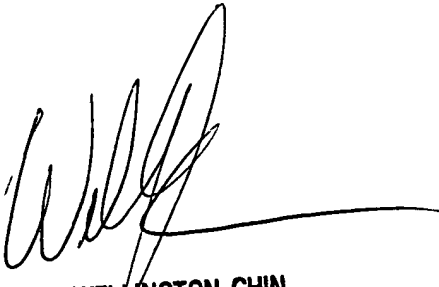
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, WELLINGTON CHIN can be reached on 703-305-4366. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3988.

Art Unit: 2664

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

Maikhanh Tran

November 4, 2001



WELLINGTON CHIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600